

Amendments to the Specification

Page 6, rewrite the paragraph commencing on line 3 as follows:

-- Fig. 1 diagrammatically shows an n-p-n heterobipolar transistor of which the emitter is graded stepwise. A heterobipolar transistor comprises a plurality of layers which are epitaxially grown one on top of the other. A subcollector 2 is disposed on a semi-insulating InP layer 1. A collector contact 3 and a collector 4 border on the subcollector 2. A p^- doped base layer 5 borders on the collector 4. A face of the base layer 5 remote from the collector comprises a base contact 6 and an interface with an n^- doped emitter semiconductor layer 7 (~~emitter semiconductor~~ layer HLS). As a rule, the base layer comprises a semiconductor material which has a small band gap value, for instance, InGaAs. The n^- doped emitter semiconductor layer 7 comprises a semiconductor material having a great band gap value. Such materials, for example, are InP and InAlAs. The n^- doped emitter semiconductor layer 7 is followed by an n^+ doped emitter semiconductor layer 8 comprising a semiconductor material whose band gap value is great. Normally, the semiconductor materials of the n^- doped emitter semiconductor layer 7 and the n^+ doped emitter semiconductor layer 8 are identical. An n^+ doped emitter semiconductor intermediate layer 10 (~~emitter semiconductor intermediate layer~~ HLZS) is arranged between the n^+ doped emitter semiconductor layer 8 which has the great band gap value and an n^- doped emitter semiconductor layer 9 which has a small band gap value and also is the last one of the stacked, epitaxially grown emitter layers. The band gap value of the emitter semiconductor intermediate layer 10 is greater than the band gap value of the n^+ doped emitter semiconductor layer 9 having the small band gap value, and is smaller than the band gap value of the n^+ doped emitter semiconductor layer 8 having the great band gap value. A metallic emitter contact 11 is disposed on one face of the n^+ doped emitter semiconductor layer 9.--